

1172 k. 10.

a

AN
EASY WAY
TO
PROLONG LIFE

By a Little ATTENTION to

What we Eat and Drink,

[Price Two Shillings.]

N

AN

EASY WAY

TO

PROTECT LIFE



What we Eat and Drink

1. Price Two Shillings

AN
EASY WAY
TO
PROLONG LIFE,

By a Little ATTENTION TO

What we Eat and DRINK;
CONTAINING,
A CHEMICAL ANALYSIS, or, an ENQUIRY
into the NATURE and PROPERTIES, of all Kinds
of Food; how far they are wholesome, and
agree with different Constitutions;
WITH
Some Directions respecting our WAY of
LIVING.

Collected from the AUTHORITIES of some of our
Ablest PHYSICIANS.

By a MEDICAL GENTLEMAN.

L O N D O N:

Printed for the Author, and sold by J. BELL, near
Exeter-Exchange, in the Strand.

E A S Y W A Y
P R O L O N G L I F E
A D V E R T I S E M E N T.

THE observations throughout these pages are not only supported by the authorities of some of our best Medical Writers, but are the result of experience and practice; and that reader who has sufficient resolution to pay a proper regard to the directions here given, will, in a very little time, congratulate himself for his discretion, and thank the Author for the benefit he has received from him. He presumes to advance nothing but what is undeniably true; and if he has not wrote like a physician, it is, because he wishes to be understood by all classes of people. He begs leave to say, that once reading this work is not enough: it should be perused again and again.

N. B. He has not given his authorities, because he would not break in upon the reader's attention. He is aware, that the doctrine will, of course, have its enemies; but of that he is regardless.



(11)

AN
E A S Y W A Y
TO PROLONG
L I F E.

HEALTH being the greatest blessing upon earth, it is natural to imagine, we should be studious to preserve it; and yet, if we take a view of the actions and conduct of mankind in general, we are led to suppose that it is not the greatest good. Instead of paying any regard to it, we frequently indulge our appetites, at the expence of our constitutions. The human body is a piece of mechanism, that requires care and attention. It may be compared to clock-work, which, if not kept free from dust and other extraneous, injurious substances, will presently be out of order. Life is, generally speaking, shortened or prolonged, according to the care we take of it.

In the first age of the world, the life of man was nearly a thousand years; but after the flood,

it was abbreviated to half its length. Three generations later, it was reduced to one fourth of its original term, and man seldom lived above two hundred years. About the time of Moses, it became shorter still, commonly not exceeding one hundred and twenty years, and now, it is reduced to little more than half that period.

But, though we find this gradual declension in the several ages of the world; yet we must understand, that it was not *equally* so, in all parts, at the same time; for difference of climate, and difference of living, caused a difference in the length of life. Hence, some of the inhabitants of the earth lived three times or four times as long as others.

Now, why the days of man should be thus shortened, and his term of life so much reduced, is an object worth our enquiry: and, if we compare the manner of our living now, with that of the first age of the world, we shall see evident reasons for it; every generation having, more and more, impaired its constitution by a degenerate course of living, incompatible with the laws of nature. And as we must, of necessity, admit of hereditary infirmities, we have reason to expect, (unless by great reformation of the injurious customs of later ages,) that life in future will be shorter still.

TO PROLONG LIFE.

'Tis true, there is another rational cause, namely, that when the number of men upon the earth was small, it was necessary their life should be prolonged, for the purposes of population; but as they increased, this became no longer necessary, and the wisdom of the Creator found it requisite to shorten their days, lest the earth should be overstocked. For were men to live nine hundred years now, with the present encrease of the species, there could not be provision for one tenth part of their number. But, notwithstanding this, it is a matter of melancholy consideration, to think, how much longer a man might live, with temperance, than he does, at present; and how soon the gratification of a little momentary pleasure hurries him out of life, perhaps to the destruction of his family, and the loss of happiness hereafter.

In the infancy of the world, man sought only after the necessary requisites of his being, and was contented with that competent subsistence, which nature required; but, in process of time he grew dissatisfied with the bare necessities of life, (that wholesome provision that would have greatly prolonged it,) and hunted after variety and excess, to please and gratify a
A 2 sensual

sensual appetite. Thus, one age taught another to be irregular and *disordered*, dictated new inventions to succeeding generations, and transmitted their ruined practices to the following ages to imitate and compleat.

Hinc illæ lacrymæ! — After this manner, and by such means, is the life of man beset by innumerable infirmities and diseases: thus, is he cut off, before he is well aware of it.

Now, as it is natural to man to covet length of life, we have reason to suppose, he will be glad to pay some attention to those things, that will either prolong or shorten it; and, as length of life depends upon health, health is the principal thing to be considered.

The practice of physic was anciently distributed into three branches; the first of which was confined to surgery; the second, to the administration of internal remedies; the last, to a due regulation of diet. The two former have, in no age, received more useful improvement than in the present. But, it is greatly to be doubted, whether or not an attention has been paid to the latter, in proportion to its dignity and importance.

Many

Many are the causes of ill health, but the principal one is the variety and excess of food. To this then, at present, we shall turn our enquiries. But, before we proceed, it may not be unnecessary to give the reader some little insight into the nature of digestion and the properties of food in general.

When food is thrown down into a healthy stomach, it naturally dissolves and ferments, it being a natural property of the stomach to produce fermentation. The aliment being dissolved and fermented, is again rendered solid by the juices of the stomach; and the nutritive fluid being expelled from the solid part, is passed into the intestines, where it is absorbed by certain vessels that open into them, and is converted into blood. The remaining part of the food, being retained in the stomach, during this process, is afterwards evacuated. But this fermentation in the body is not exactly similar to fermentations out of the body; as, in fermentations out of the body, the air contained in the substances fermenting is let out, which may be found by experiment; but, this is not the case in healthy persons and in proper food, within the body; fermentation there takes place without any extrication of air. In weak stomachs, indeed, and in the digesting of
some

some particular foods, extrication of air will often so distend the stomach, as to occasion flatulencies and pain; but this is always irregular and unnatural.

Now, if such extrication of air should happen, or the food we take, be such as will not, in the stomach, readily dissolve, ferment, become solid, or re-dissolve; or, in short, if it be such as shall, in any way, resist the powers of the stomach, digestion will be imperfect, and the whole system disordered; it being only such part of the food as is digested, that nourishes the body.

If the digestive powers of the stomach be weak, natural fermentation will not take place, but such fermentation as we observe in flour, when mixt with yeast, that is, the air in the substances we eat, will be extricated; and sometimes to such a degree as to distend the stomach greatly, and bring on, what is called wind, belchings and pain. In this case vegetables will turn acid, and meat will putrify, before either of them are passed from the stomach. This occasions heart-burn, a certain sign of indigestion; and, if this weakness of the stomach continues, and putrefaction runs to a great height, sickness, vomiting, and purging will be the consequence, and sometimes fever. Now, should

should any quantity of this putrid food be absorbed by the vessels, and, in its passage thro' the body, be carried into the blood, it will weaken the whole system, and, if not timely prevented, bring on such a general putrefaction of the blood, &c. as to prove fatal.

If what we eat, be of hard digestion, that is, such as will not readily dissolve, or break down, or ferment in the stomach, either owing to the nature of the food, its hard texture, or the weakness of our digestive organs, it will remain too long, before it be passed off, and produce a sense of weight, fullness, oppression and cold; as is the case with salted meats in weak stomachs. 'Tis the same, if it will not re-dissolve, after it is coagulated or become solid.

So again, if it be too easy of digestion; that is, if it be such as will not remain long enough in the stomach, owing either to its want of tendency to become solid again after it is dissolved; or to the strength of the stomach preventing it, the nutritive part will not have time to separate, and the body will not be nourished.

Further, it must be observed that circulation is carried on by a contraction of the heart, driving the blood from its cavities into the blood-vessels, which,

which, immediately on receiving it, contract likewise, and impel it on, thro' the whole round of the system, to the heart again. Now, if the heart and vessels contract too quick, or with too much force, it occasions a strong, quick pulse and fever, and will often throw the blood in such quantities upon the brain, which is a tender, delicate part, as to bring on Stupor, Apoplexy, Delirium, and Death : And, it is the property of some substances to stimulate or encrease this action of the heart and vessels ; and of others, to diminish it. Food of a viscid, clammy nature, glary, like the white of an egg, will adhere to the sides of the stomach, and, by so doing, throw the blood, from other parts of the body, in such quantities upon the brain as to oppress it, and sometimes occasion Apoplexy. How this is brought about, is unknown ; but experience shews us that it is so.

Persons have been so disordered by eating muscles, which are of a viscid nature, that, without some timely assistance, they would have died. In these cases, the head swells, the face becomes of a black red, the eyes are ready to start from their sockets, and a Stupor succeeds; but by administering a vomit, and making the stomach discharge its contents, and by opening the jugular vein, the patient has sometimes recovered.

From

From hence it appears, that some kinds of food are wholesome, others unwholesome, and that there is none universally proper. It must be adapted to the constitution.

Now, there is a period in the life of man, in which the organs of digestion are weak, and yet, at the same time, there is a necessity for much nourishment. This period is infancy; for, as at this time, the body encreases fast, much nourishment is required to help and forward the growth: milk being naturally provided, and therefore probably adapted to it, we may suppose it to be a food of easy digestion and considerable nourishment. Examining then the properties of milk, will give us some insight into the nature of food in general.

Milk is not a simple substance; it is a mixture of three; namely, coagulable matter, expressed oil, and sugar. Coagulable matter is that which will unite, and become solid, leaving the rest thinner and more fluid, *viz.* the curd; and expressed oil is such as can be procured from any substance by pressing, as oil of almonds, olives, and the like: by expressed oil, in milk, we understand the cream.

The most simple food, then, does not appear to be the easiest of digestion; if it was, we should have expected that milk would have consisted of one substance only.

That the coagulable matter is capable of affording considerable nourishment, may be gathered from our experiencing that animal mucilage nourishes the most; mucilage being that substance which has sufficient moisture to keep it together: as, for example,—sound, good meat.

This coagulable matter, in milk, is fluid indeed when taken, but there is a juice peculiar to the stomach, very different from an acid, that renders it solid. We find the stomach of a calf, though cleared of every thing that is acid, to have this property. An infusion of a few grains of the inner coat will coagulate or curdle several quarts of milk.

With respect to cheese, for I shall not have a better opportunity to mention it, it has, in general, a costive quality; but it differs, in proportion to the quantity of oil, in the coagulable part. The more rich, oily parts there are in cheese, the more nutritive it is and soluble: that is, the readier it will digest; the leaner the cheese, the more difficultly

TO PROLONG LIFE. II

difficultly it digests. Cheese is liable to become rank and putrid, we must then consider it as having all the effects of animal food, when advanced to putrefaction; at this time it ceases to be nutritive, and can only be considered as an assistant to digestion. Cheese, indeed, as food, is only fit for the laborious and robust.

Having mentioned cheese, let me drop a word or two upon butter. A quantity of pure cream eaten, is undoubtedly unwholesome; being, from its disposition to get acid and rancid, very difficult of digestion; but, in the form of butter, it may be used with advantage. 'Tis a strong nutriment, fit to accompany our vegetable diet, especially such vegetables as are naturally dry of themselves; in this case, it gives them the properties of rich, oily substances.—But, to return.

It appears then that milk, and of course all other food, must become solid in the stomach, and, after that, undergo a fresh change, that is, be redissolved, for digestion; for which purpose, it must remain some time there, before it be passed off.

Now, that the expressed oil, which is the cream, helps digestion, is evident from milk's not digesting so well when it has been skimmed, the
C 2 curd

curd being harder ; for the cream and the sugar, being mixed with the curd, separate the different parts of it more from one another, so that the natural fluid of the stomach will penetrate the easier, and fermentation go on the better *. And as to sugar, it, being from its nature more apt to ferment, will of course facilitate digestion.

That expressed oil affords much nourishment, we find from men and animals being able to live a long time upon nuts, almonds, &c. such containing a quantity of this oil. But, expressed oil alone produces sense of weight on the stomach, owing to a relaxation it brings on, preventing the stomach's contracting and expelling its load, and if taken in quantities, it will bring on sickness.

That sugar also affords great nourishment, is evident from animals thriving on the shoots of young plants, which contain a great deal of sugar ; and from some negroes living wholly on the sugar-cane. But sugar alone is viscid, and, by adhering to the sides of the stomach, will stimulate it and disorder the system, and if diluted with any watery fluid, would be so thin as not to be

* If new milk is too rich or heavy for a child's stomach, let it be diluted or mixed with water ; it should never be skimmed.

retained in the stomach long enough for digestion; but mixed with the coagulable part of the milk, it is sufficiently retained. Either of these substances alone then, *viz.* coagulable matter, expressed oil, or sugar, would be *hard* of digestion; but blended, as in milk, they are *easy* of digestion.

Immediately after child-birth, when the milk begins to flow in the mother's breasts, it contains a larger quantity of sugar and water (for there is always a small quantity of water) in proportion to the coagulable matter. Some months after child-birth, the coagulable matter encreases, and the sugar proportionably diminishes. For as the infant-stomach is weak, the solid part of the milk is, at first, less, so that a looser mass is formed, much easier to be dissolved. As the child grows stronger, its stomach can bear more of this coagulable matter, and digests it, if it be firmer. This points out, that a young child, one of a month old, will not thrive, in general, on breast-milk eight or nine months old.

We also learn from this, that weak stomachs require food of easy digestion; strong stomachs, food of harder digestion. Thus, chicken, &c. will nourish people most, recovering from sickness, and bacon, &c. will best recruit a labourer.

Hav-

Having thus far considered the properties of milk, the food Nature has designed for the infant-stomach, we shall be able to discover the wholesomeness of other foods, by examining *their* different properties; and we will begin with vegetables.

The vegetable substances capable of nourishing are as follow :

1. Farrinaceous matter, or flour. This is generally contained in grain; but sometimes we find it in the stems of plants, and sometimes in their roots.

2. Vegetable mucilage : as for example, gum-arabic, &c. That this is capable of nourishing, is evident from whole caravans living on it, for a long time, when they can procure no other food.

3. Sugar.

4. Expressed oils. And,

5. Native vegetable acid; or the juice of sour fruits, which tends to take off the putrescency of animal food : that is, to prevent meat from corrupting, while it continues in the stomach.

For

TO PROLONG LIFE. 15

For animal food, without a mixture of vegetable, is apt to continue too long in the stomach, before it ferments. In this case, it will sometimes begin to putrify before it be passed off, which putrefaction getting into the blood, will often bring on a putrefaction of all the fluids of the body. This is a complete sea-scurvy, which, if not timely remedied, always terminates dreadfully. Salting provisions makes them harder of digestion; and though it prevents meat from corrupting soon out of the body; yet, as the salt seldom if ever penetrates sufficiently into the substance of the meat, so as totally to secure it against putrefaction, when in the body, if it is not immediately made to ferment, by the addition of vegetable food, or some vegetable acid thrown in with it, it will be apt to putrify before it digests, and contaminate the whole system. Hence we see, how liable mariners are, on a voyage, where there is a scarcity of vegetables, to be afflicted with the scurvy, and how soon they get rid of that disorder, when they once get on shore again, to the free use of herbs and roots.

Now, these five vegetable substances, I have mentioned, go naturally through fermentation, and are converted into blood.

With

With respect to the fibres, the solid part of vegetables, we find them frequently pass through the body, without being altered. As for example, peas and the skins of gooseberries, currants, &c. Now, as the texture of the strongest tendons of animal food is constantly destroyed in their passage through the body, while such parts of vegetable food shall be evacuated as they were taken in, it is a question, whether these last were digested? If any of them are, it must be such only as are young and tender.

But, to return. Farrinaceous matter is contained in the seeds of all vegetables; but in many, it is so mixed with other substances, as to be unfit for use. Thus, we find it in peas, beans, &c. but in too small quantities for the purposes of life.

So again, we meet with it in nuts; as walnuts, chesnuts, almonds, filberds, common nuts, &c. But these contain too much oil to be wholesome for common food. Besides, they yield a bitterish, astringent matter, which adds to their unwholesomeness. Bitter almonds, acorns, &c. which contain a great deal of this matter, are more unwholesome still. The oil, contained in nuts, will often give a sense of weight in the stomach:

stomach, and stimulate the system during digestion, especially when eaten raw. Besides, the farrinaceous matter in them have a viscidty that renders them hurtful to the constitution; but roasting them will destroy this viscidty, and then they may be eaten safely, and will afford much nourishment. They may be rendered easier of digestion, by mixing them with flour. 'Tis the cocoa-nut, mixed with flour, that forms chocolate.

Farrinaceous matter is found also in many roots, as in potatoes, &c. and sometimes in the pith of trees, as in the palm-tree.

We use the pith of one tree, which we make into sago, by moistening it with water, beating it up, so as to separate it from the fibrous part of the tree, drying it into a cake, and afterwards reducing it to powder. Thus, it becomes easy of digestion, and does not stimulate; but, still, as it passes off too soon from the stomach, it does not afford much nourishment. However, it is very proper food for weak stomachs; as in fevers.

In the East, they eat rice; in England, wheat; in Germany, rye; in some parts, oats and barley; and in Africa, Indian wheat. This is

the grain commonly used for food, and it appears to be well adapted to digestion.

Farrinaceous matter is, in its nature, solid, capable of being dissolved in water, and forming a jelly. If, before we dissolve it in water, we expose it to heat, it coagulates or becomes solid; thus, if we bake it, we convert it into bread; after which, it will not so readily dissolve. But bread dissolved by long boiling, is less viscid than a solution of flour would be; and consequently more wholesome. Was flour used, with water, raw, it would be so viscid as to clog and cloy the stomach; we therefore prepare it to take off this viscosity.

Flour is not apt to undergo that fermentation in the stomach, so as sufficiently to correct the putrescency of animal food; we therefore ferment it first; that is, we make it into bread. Another reason for our converting it into bread, is, that in fermentation, extrication of air takes place, which leaves a number of holes, making the bread spongy; by which means, when eaten, it soaks up the fluid of the stomach, and facilitates digestion.

In order to coagulate the flour, that is, make
it

it into bread, and give it a whiteness, which is the nature of all coagulants to do, bakers mix with it a quantity of allum, which, if not so great as to give the bread a taste, can do no harm to adults; but a small quantity will do much mischief to infants. Panada, therefore, for children, should by no means be made of bread in which any allum has been mixed. It is for this reason physicians prescribe biscuit-powder.

Sometimes bakers use whites of eggs, and sometimes spirits of wine, to coagulate the flour, as in French bread; the first is innocent, and the last evaporates during the baking, and can produce no ill effect. For if bread is not perfectly coagulated, it will sometimes ferment a second time in the stomach, particularly if it continues long, as in weak stomachs, and turn sour; but baking it a second time will totally prevent this. Thus, rusks and toasted bread are often prescribed for disordered stomachs, as being least liable to do mischief; for the least extrication of air in weak stomachs is injurious.

But farrinaceous seeds and roots are not sufficient to correct the putrescency of meat; we therefore make use of vegetables, that were not

originally designed for food, namely, potherbs. Of these,

The one sort are cabbages, colliflowers, brocoli, and all the varieties of this class of plants. They contain naturally a stimulating oil, and a bitter astringent juice, so as not to be fit for use; but we find this only in wild cabbages, &c. By cultivation, this oil and bitter juice are destroyed, and such as grow in our gardens consist of little more than mucilage and sugar; and, of course, are fit for food.

The method taken to destroy these noxious juices, is, to grow the plants in the dark, or, with as little air as possible: this is done by planting them in a rich soil, and thus making them so luxuriant, that the leaves shall embrace one another, by which means the body of the plant grows in the dark, and with little or no air. Hence the inner leaves become white, and are free from those hurtful juices. The outer leaves may be eaten, but the inner ones are most wholesome. So young plants are more wholesome than old ones, as whatever of these juices they contain, they are not near so rank.

Another kind of plants we use, are parsley, fennel,

fennel, thyme, mint, sage, &c. and some others of the same kind. These contain a stimulating oil, that would be injurious to the constitution, if eaten in any quantity; and on that account are only used as condiments with a seasoning to other foods. Cellery is of the same kind; but by earthing it up, and thus making it grow in the dark, and with little or no air, we destroy its noxious oil. Wild cellery, if eaten, would blister the mouth.

The several species of onions, garlick, shalots, &c. are of another class; we cannot destroy the oil in these, but by boiling.

Lettuce, endive, dandelion, &c. contain much opium, and when wild are very bitter and dispose to sleep, consequently are unfit for food, but by cultivating them in rich soils, and covering them from light and air, by tying them up, we render them wholesome.

Spinnage, beets and other plants of that kind, when wild, contain also a very bitter oil, so as not to be eatable; but by cultivation in rich soils they lose this oil.

In the same manner, asparagus contains oil so stimulating,

stimulating, that, if eaten wild, would blister the tongue; but by cultivating it in rich ground and making use only of the young shoots, we avoid this inconvenience: but I shall take occasion to mention this and every other article more fully hereafter.

None of these plants alone afford much nourishment: we use them to correct the putrescency of animal food, and particularly in the summer, as not stimulating.

They are apt to ferment, and turn sour in a weak stomach, and in fermenting, will let loose the air contained in them, and occasion wind: when persons find this, they should refrain from eating them, till their stomach grows stronger; for by continuing to take down such things as disagree with them, they not only disorder themselves for the present, but will, in time, so injure their digestive-organs, as to be hereafter attended with dreadful consequences.

Peas, beans, kidney-beans, &c. are more flatulent or windy still; especially when eaten unripe, as is always done: such persons therefore with whom they disagree, should by no means eat them.

With

With respect to esculent roots; these contain mucilage, sugar and farrinaceous matter, that is, flour. The two last afford much nourishment, but the mucilage does little else than forward fermentation. The more mucilaginous and watery these roots are, the more apt they are to ferment and correct the putrescency of animal food, and consequently the fitter to be eaten in warm weather. But the more sugar and flour they contain, the more they nourish.

Turneps, radishes, onions, &c. are equally as liable to ferment and correct putrescency, as the herbs springing from these roots; and as they contain a greater quantity of sugar than their respective herbs, they are more nutritive.

Carrots, parsneps, artichokes, Jerusalem artichokes, &c. contain much sugar and farrinaceous matter, but very little mucilage. These are wholesome, nutritive, and easy of digestion.

The sugar adds much to the nutritive quality of the farrinaceous matter in all these substances.

Potatoes, yams, earth-nuts, &c. contain flour almost alone, with very little sugar, but more water than we find in farrinaceous seeds. However,

ever, the farrinaceous matter is the same in both, and is coagulable by heat. We boil them and roast them, to destroy their viscidiry.

It was but lately that these roots were introduced into Europe for food. They are as nutritive as wheat flour, but cannot be so well made into bread without a mixture of flour, as they will not readily ferment without some such mixture. One reason for our not growing them so generally as wheat, is, that they are more apt to fail in the produce. The crop is not equally certain.

It is not yet determined, whether mushrooms are animals or vegetables. They have all the properties of animal-food, and must be considered as such.

FRUITS.

FRUITS contain sugar, native vegetable acid, and mucilage; and their skins contain more or less an astringent juice; but so little of it, as not to render them unwholesome. Nay, it is rather of service, as it stimulates the stomach, causes it to contract strongly, and thus prevents the fruit becoming acid and flatulent. The
sugar,

TO PROLONG LIFE. 29

sugar, acids and mucilage are capable of fermenting and being converted into blood. As sugar affords more nourishment than any other substance, such fruits as are sweetest are the most wholesome, *viz.* figs, grapes, &c.

Sugar is even more nutritive than flour, but it is seldom thoroughly digested; being so very soluble, it passes off from the stomach before any change can take place in it, but entangled in the cells of fruit, it is retained longer in the stomach, so as to yield some nourishment. So again, it is not apt to ferment in the stomach alone, but mixed with the mucilage of fruits, fermentation readily takes place. Besides, the acid of fruits helps to correct the putrecency of animal food.

The more diluted sugar is, the more apt it is to ferment. Hence, watry or mucilaginous fruits, with little sugar, as goosberries, currants, cherries, &c. afford but little nourishment, but then they tend more to correct putrescency.

Such as contain much sugar and less water and mucilage, are not so apt to ferment, consequently are not so proper to correct putrecency; but then they are more nutritive than such as

E

contain

contain more mucilage and water, and less sugar. They afford so much nourishment, that in many countries they are used as food: thus, figs, dates, &c. in Portugal, are eaten as common food.

By evaporating the water from fruits, that is by drying them, we lessen their disposition to ferment, consequently, we make them less flatulent and more nutritive.

The fermentation of some fruits in the stomach, have, by letting loose the air, sometimes so distended it as to prove fatal; but we may correct this by adding sugar to them or spices. However, such as find they disagree with them, if they value their health, should refrain from eating them.

Fruits containing a great quantity of native vegetable acid, afford so little nourishment, (as lemons, oranges, &c.) that we seldom use them, but as a power acting on the stomach, to correct the bad properties of other food; as will be shewn hereafter.

Sour fruits, eaten in autumn, have been accused of bringing on violent continued purgings, but without any reason. Indeed some sour fruits

fruits will act as purgatives, and the purging shall continue; but this must be owing to the state of the body, predisposed to purge; for we find, that when fruit purges a body, not predisposed to purge, no purging continues when the fruit is evacuated. In hot summers, when there is great plenty of fruit, dysenteries or continued purgings are apt to be general, but this is owing to the heat of the weather; for persons will be afflicted with dysentery, who eat no fruit. In short, in such disorders they counteract; and those who eat no fruit, are more apt to purge, than such as do. Nay, if large quantities of fruit should purge, it will not prove dangerous; it will act no further than as a dose of physic.

There is one species of fruit very different from others, namely, cucumbers, melons, &c. This fruit, either ripe or unripe, contains a great deal of mucilage of a particular kind. Break them in two, and you will see much of this mucilage ooze out, so as to glue the two parts firmly together. Now, this mucilage prevents the other parts of the fruit from fermenting, consequently causes indigestion, and brings on in the stomach a sense of weight, coldness and sickness; for though the substance be soft, it will not readily

dissolve. Cucumbers have been known to lie in the stomach three days undigested. We are led to use them in the summer as cooling food; but they are very injurious to the constitution. Besides, they contain a quantity of essential oil, (which no vegetable substance does) very disagreeable and hurtful to a weak stomach. If they are eaten, therefore, it should be with oil and pepper, as correctors of their noxious qualities. There is a natural bitter in the skin of the cucumber, which will serve to digest it, if eaten at the same time; but this should only be done when the cucumber is young, as it afterwards becomes injurious to the stomach.

Having now treated of the properties and wholesomeness of vegetable food, we will proceed next to animal; and herein we will first consider the propriety of using it.

It has been given as a reason for not using animal food, that it was inconsistent with humanity. There can, however, be little difficulty about this, as there are a great number of animals that must live on animal food wholly, not being able to eat vegetable. It was therefore the intention of the Creator, that animal food should be eaten. All that is to be considered,

sidered, is, whether man is that animal that is destined to live upon animal food. The Pythagorean doctrine, heightened by superstition, has been a means of making numbers of people, viz. the whole of the Gentoos, the whole empire of Hindostan, and part of China, larger together than France, Spain, Italy, and England, wholly abstain from meat.

It is also to be observed, that the race of particular animals is seldom diminished, tho' we destroy many of them; the increase of animals being much below what *might* be propagated. One man and one woman might, in the nature of things, have thirty children; but, in general, they may have ten, five boys and five girls. At every generation, then, were men propagated to the utmost, they could increase in number five times; so that, in a very short time, a nation must become exceedingly populous. It is the difficulty of procuring food, and obtaining the necessaries and conveniencies of life that prevents this propagation: A proof of the superintendency of Providence. Now as it is in man, so is it in other animals. It is possible for a sow to bring forth ten pigs at every litter, so that were this species propagated to the utmost, in a few years, the increase would be prodigious. Ten-fold

fold in one year, and a thousand-fold in ten years. Here also the difficulty of obtaining food prevents increase; there being always a desire of propagation between the sexes.

This is more evident, if we observe the great increase of rats in a granary, where they multiply, in proportion to the quantity of corn there lodged.

These things considered, we may readily see, that in destroying annually a number of any one species of animals, so far from diminishing that species, we shall rather increase it, as in such a case, we shall be anxious so to do. So, by sending a number of inhabitants out of a country, we do not depopulate that country, unless we exceed a certain bounds. Animals then living on one another, is the means of increasing animal life considerably: there can be, therefore, no reason why animal-food should not be used. Let us examine, then, whether this food be proper.

Most quadrupeds are confined naturally to particular climates, and most of them, in their organs of digestion, fitted for animal and vegetable food. Some have it only in their power to obtain animal food, and some only vegetable; but man
seems

TO PROLONG LIFE. 31

seems destined to cover the whole face of the earth; no climate being yet discovered unfit for *his* residence. His powers are fitted for animal as well as vegetable food, and his digestive organs equally adapted to both. And, if we consider mankind in their most simple state, where they are most guided by instinct, we find as many shepherds and hunters living on animal food, as husbandmen living on vegetable.

Animals destined to live on animal food, have their intestinal canal shorter than such as live on vegetable food. That is (in order to be understood by such as are unacquainted with physical terms) have less length of gut. And as longer retention in the stomach is required for animal food than for vegetable, and man's digestive organs are adapted to this, it appears that man is destined to live equally on animal food, as vegetable. Further, the teeth of man are a medium between the teeth of carnivorous animals, and those of graminivorous. Besides, his health is better supported by a mixture of the two, than it would be, was he to live upon one. The Laplanders, indeed, live nine months on rein-deer, and the Greenlander lives upon fish: it is possible, therefore, to live on animal food alone. However,

ever, were we obliged to live upon one sort wholly, it would be best to live on vegetable; for animal food alone, would frequently bring on diseases; a mixture therefore is best. In short, man is endowed with greater variety in his system and constitution than any other animal, he being destined to live in all parts of the earth.

Let us next consider the differences between animal and vegetable food. Now, as we said before, fermentation which takes place in food, within the stomach, is different from that which takes place out of it. If the stomach then be weak, so as not to bring on fermentation natural to it, the fermentation that would take place out of the stomach, will take place in it. Hence it is, that in weak stomachs, food turns acid and putrid. This first occasions heart-burn, a sure sign of a weak stomach; and if the putrefaction should run to a great height, the consequence is sickness, vomiting, purging, and sometimes fever. And should a small quantity of such putrified matter, as was observed before, be absorbed by the vessels, in its passage through the body, it will depress the strength, and, without a timely remedy, cause a general putrefaction of the fluids through the whole system. Thus the
mis-

mischiefs of animal food, putrifying, are greater and more dangerous than such as arise from undigested vegetable food, as this turns sour only.

Another difference is this. Vegetable food, during digestion, stimulates less. When the stomach is distended with food, the whole system, during digestion, is more or less stimulated; but more so with animal food than with vegetable. Now, the more our system is stimulated, the quicker is the circulation and the more feverish we become.

As animal food fills the blood-vessels fuller with blood than vegetable, it naturally encreases our muscular strength; but then it loads the brain, (every part being fuller of blood in proportion) and occasions heaviness and stupor: whereas vegetable food, from not loading the system with blood, rather diminishes muscular strength, but enables the mind to act with greater force. Vegetable food, therefore, is fitter to give clearness of ideas; and animal food is best adapted to labour. A physical demonstration might be given of this; but to a general reader it would be idle. However, habit has a great effect in this case. Man accustomed to labour, and to eat ve-

getable food, (as are the porters of Constantinople) may be capable of great muscular exertion; but this does not prove the power of vegetable food over animal. So a horse fed on grass, and kept in exercise, will be better able to work, than one fed on hay and corn for twelve months together, without exercise: but this neither is any proof.

The next thing to be considered is, a maxim generally laid down by all authors on this subject; namely, that simplicity of food is more conducive to health than a variety: but experience teaches us the contrary. Milk, as we before observed, which affords great nourishment, is a mixture of three nutritive substances; and we may venture to affirm, that if an alderman was to eat as much of beef-stakes, as he does of other things at a city-feast, he would bring on sickness and vomiting. Put variety of grain before a hen, and she will eat of that she likes best; but before the day is out, she will eat of the other. Instinct leads her to this, as most conducive to her health.

Almost all food contains oil, and the stomach can better bear a variety of this oil, than a quantity of one particular sort. Besides, animal and
vege-

vegetable food correct the ill qualities of one another. Animal food corrects the flatulency of vegetable; and vegetable food, the putrescency of animal. Indeed, a mixture of some foods will disagree, as fish and milk; fish coagulating milk too firmly for easy digestion; but there is no rule without an exception.

The mischief of variety of food is its tempting us to eat too much: but if we avoid eating too much, variety is best, provided that variety consists of things easy of digestion.

But the most singular and curious circumstance, with respect to food, is this. The powers of digestion are adapted to the want of blood in the blood-vessels. If they are not sufficiently full for the purposes of health, the appetite is great, digestion is strong, and much blood is formed; but if they are full enough, there is no appetite, digestion is weak, and no blood is formed. For, let a man swallow as much food as he can, without an appetite, though he is able to digest it, it will not be converted into blood. So watchful is Nature of her health.

Eating too much food, in general, for a length of time does harm. It weakens the organs of

digestion, debilitates the constitution, and wears it out. Hence arise gout, apoplexy, and all the diseases attendant on old age. In disease, men, eating too much, never escape with impunity.

We shall now proceed to the properties of the different kinds of animal food. There are two substances in meat capable of nourishing; mucilage and expressed oil.

Animal mucilages differ much from one another; but considered as food, they do not. The only difference of consequence is, as far as depends upon their texture. When the fibres of an animal are large, they are not easily dissolved; of course, they are difficult of digestion. Beef is, on this account, more difficult of digestion than mutton; the fibres of the one being larger than those of the other. On the same principles, when food is coagulated firmly, it is also difficult of digestion. The firmer the coagulum, that is, the less fluid it contains, the more difficult it will be of digestion. Animal food, whose fibres have but little fluid between them; that is, dry meat, is more indigestible than moist. Thus, lean animals are harder of digestion than fat ones; and the lean part of fat meat is easier of digestion than the lean part of lean meat. By the same way of reason-

reasoning, meat roasted or boiled a great deal, is not so digestible as when roasted or boiled but little; for when the fluids are expelled by heat, the fibres approach closer to each other, and, when in the stomach, will not admit the juice of the stomach so readily to penetrate it, consequently, fermentation will not take place so soon.

The readier animal food dissolves in water, the more digestible it is. A flounder boiled in an equal quantity of water, is sooner dissolved than mutton; therefore flounders are easier of digestion than mutton; the juice of the stomach being little else than warm water, helped by fermentation. But fish, though readily soluble in water, has a property in it that renders it indigestible, which is a certain glariness or viscosity; but when the stomach is strong enough to digest it, it is easier of digestion than either flesh or fowl.

Meat apt to putrify, is sooner digested, than such as is not. Pidgeon will putrify sooner than duck: of course, pidgeon is easier of digestion than duck. Now, as the fluids in animal food tend to hasten putrefaction; by depriving it of those fluids, by long boiling or roasting, we render it harder of digestion. By boiling meat till

it

it be free from gravy, we can keep it from corrupting for six months. A further proof that meat much dressed, is less wholesome than such as is little dressed. Such meats, however, as putrify the soonest, are injurious to weak stomachs, as this putrescency stimulates during the time of digestion.

It is with a view of rendering meat easier of digestion, that we keep it some time after it is killed before we eat it. As soon as meat is killed, it begins to putrify; and putrefaction is the most effectual breaker down of animal substance, and a great assistant to solution, which is the immediate forerunner of digestion. But the length of time meat ought to be kept, should be proportioned to its tendency to putrify, and the heat of the weather. It is eaten, for example, much sooner in summer than in winter.

But the property in which meats differ most, is their viscosity or glariness. Such as are viscid, adhere to the sides of the stomach, and stimulate much. In quadrupeds, young animals have this property, such as veal, pig, fawn, and lamb; but in a smaller degree. Young birds have the same bad property, and all fish, in a great degree; particularly

ticularly shell-fish, which on this account, have often proved poisonous and fatal to many. When these have proved fatal, it has been ascribed to the copper vessel in which they were dressed; but a little observation would shew the contrary. When persons lose their lives by the ill effects of copper; sickness, vomiting, and purging take place: but when poisoned by shell-fish, the head swells, the breast is oppressed, and stupor is the consequence.

Animal food dissolved in water, forms a gelatinous solution or jelly, which is of a viscid nature, and in some degree, produces the same effect as viscid foods. It stimulates, but does not yield much nourishment. At the same time, it is difficult of digestion, and of course, improper to be taken by diseased or weak stomachs. Jellies, though long prescribed to strengthen the system after a fever, have lately been found prejudicial, and the use of them are therefore exploded.

Essential oils, inherent in some animal food, render it difficult of digestion. The essential oils of vegetables are often agreeable to the stomach, and stimulate it so as to forward digestion; but those of animal food, though agreeable to the taste, are injurious. Pork, geese, ducks, salmon,

&c.

&c. contain much of this oil; and are of course, high-flavoured. They may be agreeable to the taste of strong stomachs; but if eaten in too great quantities, or if the stomach be too weak, they will disagree with it, and have the same effect with viscosity; that is, they will stimulate the system, and sometimes bring on a fever. Animal food then, that is viscid, that contains much essential oil, or will not readily dissolve, is apt to remain too long in the stomach, and do harm. But that which will readily putrify and dissolve, is retained but a short time in the stomach; and is, of course, easily digested: for digestion depending on the contraction of the stomach, if the stomach be so disordered as to lose any of its contractile powers, either by the oil or viscosity of the food, the food will be retained too long in it.

We seldom use animal food without some preparation. Those preparations are either exposing them to such heat as will coagulate the solids and fluids, or after such coagulation, dissolving them in water. By coagulating any animal solid, we take off that viscosity which almost all have when raw, and the stomach consequently bears it much better. Thus we can digest twice the quantity of oysters roasted, that we can raw.

In

In coagulating animal substances by heat, we often expose them to great fire, as in roasting; which coagulates the outer parts, forming a crust, as it were, round the inward fluids, and retaining them. This gives them an empyreumatic oil, offensive to the smell. In boiling, we avoid this empyreumatic, but then we take out the essential oil. In frying, we retain both oils, so that fried meat is more difficult of digestion than either roasted or boiled.

Chicken, partridges, veal, &c. are more wholesome when roasted, than boiled. Mutton, beef, pork, &c. are easier digested when boiled.

All quadrupeds that feed on vegetables are used, somewhere or other, for food; such as the ox, the sheep, the deer, the goat, the hog, the hare, &c. In some countries, horses are eaten; in others, squirrels, rats, and mice. Animals that live on animal food alone, are seldom eaten, as the lion, the cat, the tyger, &c. Few make use of dogs, or any animals of that class; those who do, feed them on vegetables. Such animals as live on animal food alone, being, on account of their putrescency, and of the great quantity of essential oil contained in them, both disagreeable to the stomach, and difficult of digestion.

Birds also are made use of for food, except birds of prey; that is, such as live on other birds; and we except them for the same reasons that we do beasts of prey. We prefer such as live on insects to such as feed on fish, because they are tenderer; such as live on fish acquiring a toughness.

All fish have been eaten, and all shell-fish which have sufficient muscular flesh to render them worth eating.

Those birds that are not very putrescent in their nature, and are most free from essential oil, are the easiest of digestion. As for example, moor-game, poultry, partridges, pheasants, &c; and of quadrupeds, the deer, the sheep, the ox, &c. The older animals of this class are easier of digestion than the young ones. Mutton, for instance, is easier of digestion than lamb; beef than veal; venison than fawn; and that on account of the viscosity of the flesh of young animals. Fish is more difficult of digestion than flesh, especially in weak stomachs. And of fish, those that have least flavour, that is, such as have least essential oil in them, are white, and have some degree of firmness, will digest much sooner than such

such as are of stronger flavour. Flounders, whittings, &c. are easier of digestion than salmon, soals, &c.

But still, quadrupeds afford more nourishment than either birds or fish; and those animals of stronger flavour, viz. pork, geese, duck, salmon, &c. afford more nourishment and are fitter for such as labour or take a great deal of exercise, than animals of the same class, that are easier of digestion,

Now, to correct the ill qualities of the different kind of food, and to assist digestion, we make use of a variety of things, such as are called the decoraments of the table; which in themselves afford little or no nourishment. These are spices, acids, salt, oil, and sugar,

Spices act as stimulants. It must here be recollected, that digestion depends upon the contracting power of the stomach, it being that which prevents the food turning acid or putrid. Now, if the action of the stomach be weak, that is, not sufficiently powerful, food will not be properly digested.

Spices then are powerful stimulants, that is, they encrease the action of the stomach, and are

agreeable to it; such as the aromatic spices, *viz.* cinnamon, cloves, nutmeg, mace, pimento, &c. which are the produce of the warmer climates; but they are, at the same time, inflammatory, tending to encrease the circulation of the blood, and bring on fever. We use mustard, onions, horse-raddish, &c. for the same purpose. These stimulate universally, but are not inflammatory; because their powers do not continue long; whereas spices stimulate for a considerable length of time. Mint, thyme, sage, &c. parsley, fennel, celery, &c. are stimulants, but not so powerful as mustard, onions, &c. nor are they inflammatory.

Spices seem adapted to different climates, and different stomachs. In warm climates, and weak stomachs, spices are more wholesome than in colder climates, and stronger stomachs. In warm climates, the heat of the atmosphere upon the skin keeps up constant great circulation there. The internal blood-vessels are, of course, empty, and the interior parts consequently weaker, *viz.* the stomach, &c. It requires therefore more powerful stimulants to assist digestion, and the natural weakness of the stomach prevents their inflammatory power. Hence, we may observe, that spices are more wholesome in summer than in winter; and that persons of luxurious life, who live without exercise, whose stomachs are, of course, weakened

ened and impaired, may eat them with greater safety than such as are strong, laborious, and healthful,

In colder climates, and with temperate livers, the stomach is naturally strong: very little stimulants, therefore, are required. Inflammatory ones must, of course, do mischief. If any, then, are used, it should be those of the second class, *viz* mustard, onions, horse-raddish, &c. Nature seems here to have provided for herself; for we find spices only in warm countries: none grow naturally in cold ones. But the second class are principally natives of cold climates. If any of the spices are made to grow in a cold climate, part of their stimulus is lost; and if the second class of stimulants are made to grow in a warm climate, it is the same. Pepper grown here loses its stimulating powers; and an onion grown in Spain, is not so strong as one, the produce of England. They seem destined then for particular climates. In hot countries, therefore, spices are necessary; but in colder ones, they are prejudicial. If the stomach then be weak, which, in time, will disorder the system, it may be proper, to use spices, but, if not weak, on no account to use them; for they have sometimes done so much harm, as totally to destroy digestion, unless great quantities have been constantly thrown in with the food.

A little

A little spice, used with the more flatulent vegetables, is frequently serviceable, as by encreasing the action of the stomach, it brings on digestion, before that fermentation takes place, which in weak stomachs, would be attended with extrication of air. Thus, we use pepper with greens, peas, &c. to correct what is called their windiness; and we use pepper with broth, to coagulate the fluid more firmly, and correct its putrescency, both which are brought about by the action of the stomach. Lemon-juice, barley, &c. is often added to both, for the same purpose. So we eat mustard with salted pork and beef, salted fish, &c. in order to assist digestion, by encreasing the action of the stomach; salted provisions being more difficult of digestion than such as are fresh.

The second class of substances to assist digestion are acids. None but the native vegetable acid, viz. the juice of sour fruits, is capable of affording nourishment; nor would this, if pure; it is owing to the mucilage mixed with it, that it nourishes. Acids then *assist* digestion merely.

Acids produce many effects. In the first place, they stimulate the glands of the stomach, creating by their stimulus that sensation we call hunger.

hunger. Digestion being considerably affected by the appetite; if there is no appetite, though the stomach be strong, there will be no digestion. We frequently then employ acids, a little before meals, to create an appetite. Thus, in hot countries, where owing to an encreased circulation of the skin, the internal circulation is diminished, and, of course, the stomach weakened, the inhabitants accustom themselves to the drinking of beverage or lemonade before dinner, to encrease their appetite.

Acids also promote secretion of the glands of the stomach, so as to supply the food with a watery menstruum; that is, fluid proper and sufficient to promote fermentation.

They act also as sedatives or quieters of the rest of the system, taking off that stimulus occasioned by digestion. Hence they are beneficial in warm climates, and in weather where the heat naturally stimulates the system; and that stimulus is liable to be encreased by digestion. Hence, as was said before, fruit is exceeding wholesome in the summer, and at certain times, if taken in moderate quantities.

Acids tend likewise to coagulate animal solids,
and

and fluids; and, assisted by the coagulating fluids of the stomach, they take off the viscosity of food. Thus we use lemon or vinegar with fish, particularly shell-fish. Indeed, shell-fish should never be eaten without some acid; they being, as was before observed, in their nature so remarkably viscid, and, of course, so prejudicial to the constitution. It is for the same reason, that we use acids with veal, lamb, and all young animals; namely, to correct their viscosity. Of all acids, vinegar, provided we attend to its quality, is the safest.

Acids check also vinous and acetous fermentation; that is, such fermentation as should by no means take place in the stomach. It is for this reason we use them with substances of loose texture, that are apt to turn sour in the stomach, and become flatulent or windy. Thus we eat vinegar with sallad, and greens of all sorts. So, in all weak stomachs, where food is apt to turn sour, and cause heart-burn, the use of acids has been found to correct and take it off. It is on this account, that fruit has been introduced after meals. Acids then are useful for many purposes in digestion; but taken in too great quantities, they are hurtful, as they will produce a disposition to flatulency, pain, and weakness, in the stomach and bowels,

bowels, which is afterwards cured with difficulty.

The next substance, in general use with food, is salt, which affords no kind of nourishment; neither will it digest, but passes through the body without any change. It is, however, universally used where it can be got; nay, all animals prefer food that is saltish to such as is not. This general instinct, we should suppose, would not be given, but to some purpose; yet it is difficult to say of what use salt is, in digestion. It stimulates the glands of the stomach, and promotes secretion of the watery menstruum; but of what other use it is, we know not.

We often preserve food with salt; and thus preserved, it is considerably more difficult of digestion. The fibres are hardened, they are not so readily dissolved, and they go through the proper fermentation of the stomach with difficulty. Thus it is, that we cannot live so long on salted provision as on fresh; for, as was before observed, the salt does not penetrate thoroughly into all parts of the meat; therefore, when in the stomach, before fermentation takes place in the outer parts, the inner will putrify, and, by infecting the fluids of the body, bring on the scurvy, as we see

it does, in persons upon a long voyage. And yet salt may be used, in the greatest quantity, so as to prevent putrefaction of food, without rendering it totally unfit for nourishment.

Oil is another substance that may be used to help digestion, it taking off the viscosity of food. Hence it is, that we eat salad, with which oil has been mixed, with the meat of young animals, as with veal, lamb, &c. and (with some kinds of fish) which, from its glariness, tends much to disturb digestion. Oil also takes off the disposition in loose vegetables to ferment improperly, and thus prevents flatulency. It is for this reason, we use it with sallads, greens, &c. But oil, in weak stomachs disposed to acidity, is apt to produce sourness in the stomach, and bring on heart-burn, sickness, vomiting, and purging. Why it should have these contrary effects, we cannot say; but experience shews it to be true.

Sugar is another assistant of digestion, by preventing the bad effects of some food, and affords considerable nourishment in itself. A diluted solution ferments more readily than a more concentrated one; that is, the more water you put to sugar, provided you exceed not certain bounds, the more readily it ferments. Sugar mixed with
a cer-

a certain quantity of water, presently becomes vinegar. Now, the looser vegetables and fruits, such as salad, currants, cherries, &c. contain in them a more diluted solution of sugar than the firmer vegetables, or the sweeter fruits. It is on this account, that we frequently eat sugar with them. Another reason why we eat sugar with such vegetables, is to take off the acescency and flatulency which they are apt to run soon into, by rendering them more difficult to ferment. Sugar also corrects the putrescency of animal food; but not so much as vegetables do. For this purpose, it was much used in England before kitchen-gardens became general.

It is not above 150 years since greens, and other vegetables were imported from Holland, (a kitchen-garden being then a great curiosity,) Salted meat at that time, was much eaten; and the sea-scurvy very general. Persons were then accustomed to eat sugared mutton and sugared ham. At present, the custom is not so much abolished, but that we eat sweet sauces with various kinds of food,

Sugar has been said to spoil the teeth. This observation may, in some cases, be just; as, where the teeth may have a more than ordinary degree

of sensibility; or it may, perhaps, by sticking about them, and turning acid, corrode them: but faults of this kind are oftener imputed to it than it deserves. The finer the sugar, the purer and less noxious it is. Preserves are far from unwholesome,—and pickles may be considered as sponges filled with vinegar.

Having thus entered into the several properties of eatables, let us now proceed to drinks.

Water is necessary to digestion and nourishment. For there are salts constantly forming in the blood, besides such as are thrown into it by the stomach: whoever has accidentally tasted their own blood, will be convinced of this, by its saline taste. There is always also, a small part of the blood, in some degree, putrifying. Now, if these salts and this putrescency were accumulated to any great degree, it would prove fatal. Water, then, is necessary to wash away these salts, and this putrescency. Besides, the saliva and natural juice of the stomach, is not sufficient of themselves to dissolve the aliment, and carry on fermentation. Water then is a great assistant. But pure water is not so proper for either of these purposes; for water will run off too soon; that is, it will not remain mixed with the food long enough.

enough to go through fermentation with it; neither will it alone carry off the putrescent or saline substance in the blood. Mixing mucilaginous matter with it, as in wine, beer, cyder, &c. enables it to answer these purposes. Thus, we see the saliva or spittle which Nature provides, is a viscid fluid, or a mucilaginous one.

Wine, being in a state of fermentation itself, tends to forward fermentation in the stomach. For any substance going through one fermentation, generally forwards fermentation in another. Accordingly we find persons accustomed to drink weak wine, cannot digest their food with water alone, but will have eruptions on the skin during the time that their meat is in their stomach. Besides, wine is as necessary to a weak stomach, as spices; for if it be not too strong, nor taken in too great quantities, it stimulates the stomach, makes it contract freer, and thus forwards digestion. In warm climates, the inhabitants could not preserve their health without it; the heat of the weather keeping up such a circulation of the blood on the surface of the body, as to weaken the internal parts, and render digestion difficult. Accordingly we find, that Nature has provided them amply with the means of procuring wine. Hence it
fol-

follows, that a glass of wine, occasionally taken in summer, is more beneficial than one drank in winter; as the one helps digestion, while the other tends to destroy it.

Was man to live the life of a savage, water would be a sufficient drink; as eating only a small quantity, and using great exercise, his digestive organs would be much stronger, and sufficient for digestion without any other assistance: but according to his present method of living, eating daily too much, and taking little exercise, he requires wine. However, the wine should be diluted with water; for was it to intoxicate to any degree, it would overthrow the design for which it was taken, prevent the stomach from eating sufficiently, and interrupt digestion going on. By wine here, we mean all vinous liquors, as wine, cyder, ale, small beer, &c.

If we drink pure water, it will find its way out of the body by urine or sweat, without carrying any of the saline, or putrescent parts of the blood with it; but if we use mucilaginous fluids, as wine, beer, &c. they remain some time in the blood, mix with the saline and putrescent substances of it, and gradually carry them off. Water then, is
the

the necessary drink, but it is much helped by brewing; that is, wine, beer, &c. if moderately taken, as we have mentioned, is the best liquor we can use.

Having said so much upon the nature of digestion, and the property of food in general, let us run over them again a little more particularly; and first, let us speak of fruits.

Stone-fruits, in general, are of a soft lax texture, and their juices dilute; by which means, they are easily dissolved in the stomach. It is for this reason, they are apt to be eaten in large quantities: Hence, as they are more liable to fermentation than any other, and produce a copious acid, they are apt to irritate the intestines, and bring on purging and vomiting. Apricots and peaches are less noxious than either the cherry or the plumb, being sweeter and richer: the later fruit is, in general, the richest.

Apples and pears being of a firmer texture, and containing a less active acid, are not so liable to a noxious fermentation as the stone-fruits, and will continue longer in the stomach; and of these, pears are more wholesome than apples; for the pear being specifically heavier than water, will
sink

sink to the bottom of the stomach, and be sooner digested; while apples, swimming near the top, will elude the action of the intestines, and by irritating the left orifice of the stomach, will often produce uneasy symptoms.

Strawberries and raspberries are of a very tender texture; therefore easily dissolved, passing off before a very active fermentation can take place, which is likewise prevented by their sweetness. On all these accounts, they are very innocent.

Currants are an acid fruit; have very little sweetness; of course, very little nourishment, and are liable to all the bad qualities of stone-fruits.

Goosberries are much sweeter, more nourishing, and more innocent; and without the husks, are very easily digested; and on account of their sweetness, less subject to active fermentation.

Grapes are a richer fruit, containing a great quantity of sugar, on which account they are more nutritive than any we have mentioned; and if eaten when perfectly ripe, and in moderation, are innocent.

When

When we apply heat to these fruits; that is, when we bake or boil them, we change their qualities, dissipate their active acid, and dispose them less to ferment. Hence, universally, baked or boiled fruits are safer than fresh. It is to destroy their disposition to fermentation, that we frequently eat them with milk or cream, whose oily nature produces that effect. Wine is also used to obviate the bad effects of fruit; but this depends upon its spirituous part, and therefore pure spirit, were it not otherwise noxious, would be most eligible. If wine be used, it should be strong and mellow. Another method of using them, is with sugar. This surely renders fruit more nutritive; and to sour fruits, must be a judicious addition. Sometimes we use oily matters; as butter in apple-pye. This, from its antifermentative quality, is a proper addition; but in weak stomachs, is apt to produce heart-burn, &c. It is safer to eat the mild fruit, before meals; the the sour fruits, after.

We come next to the herbs. Beet and spinage are watery and insipid; they contain but little sugar or mucilaginous matter; and, of course, afford but little nourishment. On account of their little acidity and loose texture, they are less flatulent than some of the other herbs.

Dandelion, endive, lettuce, are all of them milky plants; and it is almost a universal rule, that those which afford a milky juice, are remarkably acrid, and many of them poisonous; but these I have mentioned have been excepted; however, they are all opiates, in some measure, when old; for this reason, we only use them when very young, and we blanch them, to free them of their acrimony, which is done by tying them up, and thus depriving them of light. They are flatulent; and, as such, should be never eaten without pepper, or something to answer the same purpose.

Cellery contains a poisonous acrimony; on which account, it is blanched for use, though it is never wholly deprived of its acrimony in this way; boiling does it more effectually, and gives it a mucilaginous sweetness; consequently, it is most wholesome in broths, and that in the summer, when the stomach can bear stimulating most.

Asparagus is only wholesome when in an intermediate state, between root and plant; when old, it is remarkably acrid; but when young, it is sweet and mucilaginous.

Arti-

Artichokes, if young and boiled, are of a tender texture, easily digested, and not flatulent. They are sweet, and, of course, remarkably nutritious.

Mushrooms are very nutritive, and much a-kin to animal food; that is, they resemble meat in their properties; and as such, may be eaten by strong persons in considerable quantity. The morelle and truffle are of this kind; but on account of their stimulating powers, are more used as a fashionable ornament to our dishes, than as any proper food.

The next to be considered, are our esculent roots. The raddish, as being so acrid, is used only as sallad, or after meals to help digestion. It is most wholesome when scraped. The turnep is, at best, when deprived of its acrid skin, but a watery weak nutriment, very flatulent, or windy; and, if eaten in great quantities, will purge.

The carrot and parsnip, from the sweet mucilaginous matter contained in them, are very nourishing; but the carrot more than the parsnip, as containing the greatest quantity of the two.

The leek, the onion, and the garlic, are in their recent state, acrid, but innocent. When by age or climate, this acrimony is too great, we do not use them as food. When boiled, this acrimony is destroyed, and a remarkable mild substance remains, very nutritious, especially to those who can digest them raw.

But of all the culinary herbs, potatoes are the best; they, containing a kind of flour, are, on that account, very nourishing, and less flatulent than any, consequently very wholesome. The more mealy they are, the better.

The next in order are peas, beans, French beans, &c. they contain a degree of oil and sugar mixed, consequently afford pure and strong nourishment, as appear from experiments made on domestic animals, viz. hogs, &c. But as they are of firm texture, and not easily digested, their use in food should be confined to the hardy and robust. They are more flatulent than most vegetables, therefore improper aliment for weak stomachs. When eaten young, before they come to be ripe, they are indeed less flatulent, on account of their not having attained the oil they afterwards gain; but then their nutriment is proportionably diminished. French beans being eaten in their cod, are

not

not so flatulent as the other two; and peas, either ripe or not, being of a more tender and soluble texture than beans, are not so often eaten. The pea is used for culinary purposes, as puddings, &c. &c.

So much for vegetable food: let us now consider the particular sorts of animal. And first, with respect to beef and veal. Were we purely to consider tenderness of texture, the youngest animals certainly would be always preferred; but when we talk of them as nourishing food, beef is, for the reasons I have mentioned, more nutritive than veal: for when an animal is very young, we commonly have an aversion to it. The whole of it then is, as it were, a semifluid mass, which we cannot take, in sufficient quantity; and which, from its watery consistence, must be but little nutritious. It is the same with respect to mutton and lamb, venison and fawn, pork and pig, &c. Mutton has commonly been preferred to all the fleshes of quadrupeds; and indeed, besides its being more perfect, has the advantage over them of being more generally suited to different climates. Beef requires a very nice intermediate state, rich pastures and temperate air; which it seems to enjoy chiefly in this country: whereas sheep can be brought to almost the same per-

perfection in the bleak northern, as in these mild southern countries.

Hare, being an animal much exercised, acquires a firmness of fibres, and is difficult of digestion; and when killed, after a long chase, when much of the oil of the body is absorbed, its muscular parts are much firmer and tougher than when killed in the seat. The rabbit, being of very little exercise, is one of the white meats, without viscosity, and is one of the lightest and most digestible foods in use.

With respect to the hog; it, being the only domestic animal we know, of no use to men when alive; is therefore properly designed for food. Besides, as loathsome and ugly to every human eye, it is killed without reluctance. Pork is of very tender structure, encreased, perhaps, from a peculiarity in its nature, *viz.* taking in fat more readily than any other animal. Pork is a white meat, even in its adult state, and then gives out a jelly in very great quantity; and on account of its tenderness, &c. is very nutritious.

The next class of animal food, is that of birds; of which there are several kinds. The cock, hen, chicken, and capon, are entirely domestic,

mestic, there being no country in which they are found wild. They take little exercise, and live mostly on vegetables; hence they are food of a tender structure, easy of digestion, and, as a white meat, gelatinous. When very young, they are extremely viscid; when old, tough and ligamentous: so that the proper time of using them is in a middle state, between these two extremes; that is, when about a year old. Such as eat them younger, eat them when unwholesome. Now, a barn-door fowl is far preferable to one that is crammed; as exercise is necessary to give perfection; for by this means, the fat of the animal is equally dispersed through the muscular parts; whereas, when the bird is fatted hastily, the fat is accumulated in particular parts.

Turkies are of the same kind with the cock, hen, &c. equally tender, and equally easy of digestion. With respect to wild fowl; such as the pheasant, the grouse, the partridge, and the quail, they approach in their nature to the tame fowl; but are of a higher flavour, are more tender, and rather easier of digestion.

We come next to water-fowl. Of these the duck, both wild and tame, contains a great deal
of

of essential oil, and will not so readily digest in the stomach. However, the wild duck, from its being much exercised, being generally carnivorous, is more soluble than the tame duck, and, of course, easier digested. The tame goose is manifestly less viscid than the duck, but is of a firmer texture. Digestion, with regard to this bird, is not so constant; it depending on the disposition of the stomach. But the teal, though much of the nature of the wild duck, is the most tender and savoury, the least viscid, and the most wholesome of this kind.

The next class of aquatics, are the woodcock, snipe, the grey and green plover, &c. of which the woodcock and snipe, although they live chiefly on insects, are of a tender structure, approaching to the white meats of the cock and hen.

I have given the reader to understand, that exercise produces firmness. An opportunity now offers to illustrate it. The woodcock is obliged to fly much about, while the partridge walks more and flies less. Hence, it is observed, that the wing of the woodcock is always very tough, while that of the partridge is very tender; and, on the contrary, the leg of the woodcock is very tender,

tender, while that of the partridge is very tough. Hence the old doggrel distich :

“ If the partridge had but the woodcock’s thigh,

“ He’d be the best bird that e’er doth fly.”

With respect to pidgeons, another class of birds, they are, in their nature, hot and alkalescent, that is, very much disposed to active fermentation in the stomach ; and perhaps, more so than any other bird of this kind that lives on grain. We attribute this to much exercise. When young, they are tender and easily digested. As to smaller birds, viz. the lark, the thrush, &c. there is probably a difference according to their exercise and food ; but it will be sufficient to say, that, when taken at a proper age, they are tender, juicy, and wholesome.

We have a good opportunity here to mention eggs. It is obvious, from their nature and use, in the nourishment of the foetus, that they contain a larger proportion of pure nutriment than any other food. Notwithstanding this, eggs are not of easy digestion ; and from the proportion of nourish-

ment they afford, cannot be eaten in any large quantity.

We will now proceed to fish; but first, let us mention the turtle, an amphibious animal, now become a great delicacy. From some particulars in its oeconomy, from its little motion, and its living on vegetables, it is of a very gelatinous nature, and highly nutritious.

The texture of fish, in general, is more tender than that of flesh. They have nothing of a fibrous structure like flesh; of course, they are easier digested than meat, especially such as are not of a viscid nature. We have had occasion to say something on the different kinds of fish before, as indeed, we have on most sorts of food; but as it is a matter in which mankind are highly concerned, it may not be unnecessary to be a little more particular.

Those of the salmon kind, as the sea-salmon, the river-trout, the smelt, the charr, &c. are of a tender substance, sufficiently juicy and nourishing; but, like other fish, they are heating, and apt to breed humours in the skin. The salmon-trout is undoubtedly more stimulating, and less gelatinous than those of the white kind.

The

The next class, such as the barbel, the carp, the gudgeon, the tench, the chubb, the roach, the bleak, and the bream, is drier, and less tendinous; less strong and heating; and of a nature less gelatinous. The perch is something of this kind, of a firm texture, but tender substance, easily digested, neither glutinous, heating, or remarkably stimulant.

The next class is sea-fish, and that of the whiting, the haddock, and the cod. These give a gradation in tenderness, glutinosity, and stimulus to the whole system; the cod being the firmest, most viscid, and most heating, of the three.

The lump is a remarkable viscid fish, approaching in quality to the eel, and exceedingly nutritious to those who use it. The mackerel is of drier substance, and less nutritious. The mullet is between the carp and the haddock; less dry than the one, and more juicy than the other. The pike, though rapacious and carnivorous, is dry and in some degree, oily, and one of the least heating of any we take in.

Another class, is that of the herring, the sprat, the anchovy, and the shad; which are of an oily,

juicy, nutritious nature, in their heating quality next to the salmon, stimulating the system and quickening the pulse to a considerable degree.

The next class is that of the flounder kind, viz. the common flounder, the soal, the plaise, the turbot, and the holibut. These are all of a tender oily, juicy nature, more viscid than the preceding class; but less so than the following. They are set down according to their qualities; the flounder and soal more tender, the turbot and holibut more viscid.

The last is the eel kind, as the sand-eel, the common eel, the conger-eel, &c. These are of the same quality with the viper, viscid, nutritious, and difficultly perspirable; by long retention in the stomach, heating, and oppressive.

With respect to the crab, the shrimp, and the lobster, they come under the name of insects: they are of a nature, that if boiled, will give a jellied broth, and are apt to stimulate the system very much, producing heat, anxiety, and fever. As to oysters, they are nutritious, and though long retained in the stomach, as little heating to the system as any. The muscle, they say, is poisonous; but where the poison resides, we cannot tell:

tell: the ill effects sometimes on eating them, must proceed from their visciditv.

Upon the whole, we beg, it may be understood, that what has been said respecting foods, holds good only in general. Difference of constitution will produce different effects. Thus, according to the old adage, "What is one man's meat, may be another man's poison." If persons are so rash as to determine the quality of any particular food to be good, because it agrees with them, it is in vain saying any thing to them, upon the subject: what is wholesome to-day, may be be injurious to-morrow; and though at present, they find no ill effects from the use of certain things, they may lay the foundation of diseases, and unhappily experience them later in life.

But before we dismiss this subject, we must take notice of the use of coffee and tea. Much dispute has arisen about their virtues. One would imagine, frequent experience would long ago have silenced such disputes. Their effects are, undoubtedly, very much mixed, depending on the warm water. The virtues attributed to them, such as assisting digestion, relieving the stomach from a load of food, from crudities and from head.

head-achs arising from them, promoting the secretion of urine, and perhaps of perspiration, may be all fairly attributed to the warm water. The same also will have the effect of keeping from sleep. Tea, it is known, weakens the tone of the stomach, by frequent use; debilitates the system, in consequence, and brings on tremors and convulsions. The same effects are not so remarkable in coffee; but still experience shews them to be of the same nature. Coffee contains a great quantity of oil, of a binding quality, that corrects putrefaction. It is found to moderate fermentation in the stomach, and to be a powerful quieter of the system; that is, it will decrease the force and circulation of the blood, and take off the quickness and fulness of the pulse; or, in other words, it will often abate a slight fever. For this reason it is recommended in a morning for a head-ach, which it will frequently remove. So far, indeed, taken medicinally, it may be useful; and as it assists digestion, one dish may not be injurious to those who sit long after dinner, and who have strong constitutions; but in delicate habits, it often occasions want of sleep, tremors, and many of those complaints called nervous. Newmann obtained by distillation, from one pound of coffee,

coffee, five ounces five drachms and a half of water; six ounces and half a drachm of thick foetid oil, and four ounces and two drachms of earth. In short, we may conclude, that coffee and tea, however their effects be varied by habit, or particular constitutions, certainly weaken the tone of the system, and diminish the force of the nervous power.

Having now treated fully of the several kinds of food, we will next consider the quantity, time, and order, necessary to be observed in taking it: for health depends as much upon a proper attention to this, as to the food we eat. And, in this, let the palate, or inclination, be first consulted. Nature has endowed the stomach with such sensibility, that, in health, if strictly attended to, she will, in general, call or long, for that which is proper, and reject or loath that which is improper. It is this natural longing that has frequently pointed out, in disorders, food, which, without the assistance of medicine, has often recovered the patient. Eat then, by no means, that, for common food, which you dislike. *Paulo peior sed suavior cibus & potus meliori at ingrato, præferendus.* Agreeable food, though it be rather worse in quality, is preferable to that which cloy, be it ever so good.

In the next place, examine your stomach. Never eat any thing that lies heavy in it, or rises in it, any thing that is long in passing off, or any thing that is flatulent or windy, that occasions belchings, heart-burn, gripes, or fluxes; these being sure symptoms of improper digestion; the consequence of which is bad. If therefore, from a depraved appetite, you should long for such food as you experimentally found to disagree with you, by no means indulge it. By a resolution to withstand such temptations, we may keep off a number of disorders: for indigestion is the forerunner of half the diseases we are liable to.

Another thing to be considered, is the choice of food, whether such meat as you wish for, be in season or not; for that which at one time of the year is good, may, at another, be hurtful. For example, pork, during the winter, is wholesome, but in summer, it is not fit to be eaten. Our taste will guide us in this; as much difference as there is in taste, between a thing in season and out of season; so much is there in the goodness, and of course, in its wholesomeness.

It has been long a custom to keep meat a considerable time before we dress it, under a notion
of

TO PROLONG LIFE. 7

of its becoming more tender and easy of digestion. They say, when putrefaction has begun to take place in meat out of the body, it will the sooner break down in the body. This may probably be the case: but what it acquires in tenderness, it loses in its nutritive quality. It is not sufficient that your meat does not stink, the spirituous part of it must be preserved, that which gives lively and pure nourishment: meat, therefore long kept, is not so wholesome as that which is fresh killed. With respect to digestion, it goes on sufficiently soon in a healthy stomach, whether the meat be tough or tender. It is not meant to say that all meats are sufficiently soon digested; it has already been shewn to the contrary; but what is meant, is, that in meat of the same kind and age, it is of no great consequence to the eater, in point of firmness, whether it be tender, from being long kept, or tough, from being dressed, when fresh killed.

Custom is another thing to be considered in the choice of food. What we have been longest used to, generally agrees best with us. Change of diet is apt to cause some alteration: therefore when a new diet offers itself, as upon change of

L

places

places and countries, we should at first be sparing; upon further use we may be bolder. Nay, even, with those to whom a change of diet becomes necessary, it should be brought about by degrees. *Nulla subita mutatio est bona.* No sudden change is good.

The next thing we should study, is the quantity. Temperance and moderation in eating is nature's great preservative. *Plures gula quam gladius*—the throat has destroyed more than the sword. Some are apt to think, the more plentifully they eat, the better they thrive, and the stronger they grow. But this is not the case. A little well digested, will render the body more vigorous than when it is glutted with superfluity, most of which is turned to excrementitious, not alimentary fluid, and must be speedily evacuated, or sickness will follow. Our stomach is the best judge in such cases. We should never eat to satiety or fulness, but desist with an appetite. Thus shall we be refreshed; light and cheerful, not dull, heavy, or indisposed. No certain quantity of food can be prescribed as a general rule: what is convenient to one, may be too much for another, and too little for a third. A strong labouring
and

and active person may eat more freely than the weak, the studious, and sedentary, or such as take their ease: indeed, the active require greater supply. By our loading the stomach, fermentation is checked, and, of course, digestion impeded; for the natural juice of the stomach has not room to exert itself; it therefore nauseates its contents, and is attended with belchings; the spirits are clogged, obstructions ensue, and fever is the consequence. Hence arise various ill symptoms, and depraved effects throughout the body, enervating the strength, decaying the senses, hastening old age, and shortening of life. Though these bad effects are not instantly perceived, yet they are the certain attendants of intemperance; for it has been generally observed, in great eaters, that (though from custom, a state of youth, and a strong constitution, they have felt no immediate inconvenience, but have digested their food, suffered surfeit, and bore their immoderate diet well) if they have not been unexpectedly cut off, they have found the symptoms of old age come on early in life, attended with pains and innumerable disorders. In winter, indeed, we may eat more freely than in summer, because the stomach is stronger, for the reasons I mentioned before, the circula-

tion of the blood not being encreased by the heat of the weather, on the external parts of the body: but both in winter and summer, we should feed with moderation: and if we value our health, ever make it a rule to rise from table with an appetite. Should we ever be tempted to eat too much, at one time, we should eat the less at another; that is, if our dinner has been larger than ordinary, let our supper be the less, or if possible, none at all; for there is no man however careful of his health, that in this matter does not occasionally transgress.

The next caution to be mentioned on this subject, are the hours of eating. Let not the common custom of meals invite you to eat, except your appetite concur with those times. A sufficient distance between hours of eating should be ever observed, lest we charge the stomach with a fresh supply, before the former be passed away; for if any half-digested matter remains to be mixed with the next meal, it frequently occasions a foul stomach; besides, the stomach, when empty, receives the food with delight, and will be eager and sharp in digestion; and each part, as it passes along, will perform its office readily
and

and sufficiently. However, as some stomachs will digest their contents sooner than others, and if long empty, will naturally draw up from the intestines putrid vapours, which will destroy the appetite, (for how often do we fast, till we lose our appetite?) and greatly disturb the head and animal spirits; (for the head, from the great quantity of nerves spread upon the stomach, readily sympathizes with it) on these accounts, let such as feel a gnawing, as it is commonly called, within them, not wait till the stated hour of meals, but eat a little, that the stomach may have something to work on. Hence it appears, that there can be no general hour of eating. Children, with craving appetites, do, and may eat often. Young persons in health, that labour and use much exercise, may eat three times a-day, morning, noon, and night; but to such as are in years, such as are weak, as do no work, use no exercise, or lead a sedentary life, eating twice in the day is sufficient; or, persons weak and old, may eat often, but then it should be but little.

If persons confine themselves to two meals a-day, one had better be a supper than a dinner, provided they sup early; because, during the hours
of

of sleep, the body is composed, and at rest, and at this time, receives its greatest nourishment. But late suppers are very offensive to the whole frame, especially to the head and eyes, from the vapours that arise from a loaded stomach. Our food should be tolerably well digested, before we lay down to sleep; and this is not well done under two or three hours. Our ancestors used to sup at six, and go to rest at ten. Hence they could comply with that well known advice, *After supper walk a mile*, in order to quicken digestion, and dispose the body for rest.

We should not eat presently after exercise, nor when we are hot, but forbear till the spirits are retired and settled. Neither should we come to meat burthened with care or business; for owing to the sympathy between the brain and stomach, as was observed, by means of the nerve, disturbed mind will impede the functions of the stomach. It is for this reason, we eat in company, cheerfully with our friends. Mirth and good company are great helps to a dull stomach, creators of appetite, and forwarders of digestion: and it is for this reason, lively music has been introduced at feasts.

We

We should take care also to chew our meat well; for the saliva with which we thus mix it, is a great help to digestion; besides, in breaking it down with the teeth, we save the stomach the trouble: to eat greedily, therefore, and swallow our meat hastily, is not only indecent, but hurtful. With respect to drinking at meals, we should do it little and often, especially if our food be dry and solid; great draughts cause fluctuation, and disturb fermentation.

Thus, having gone through the several properties of the various kinds of food, and shewn how far they are wholesome or not, and how far they agree or disagree with different constitutions; in order to complete this treatise upon health, we should proceed to consider the articles of exercise, temperance, rest, sleep, &c. on each of which a great deal may be said; but as that would swell these pages to a size that might probably deter the reader from a perusal of them, it will be more political to defer it to some other time. If this is received with the approbation the subject deserves, the remainder will follow of course.

I N D E X.

A C I D, page 46, &c.
Anchovies, 67.

Apples, 55.

Artichokes, 23, 59.

Asparagus, 21, 58.

B A C O N, 13.

Barbel, 67.

Beans, 22, 60.

—— French, 22, 60.

Beef, 36, 61.

Beer, 53.

Beet-root, 21, 57.

Bleak, 67.

Boiling, 41.

Bread, 18.

Bread, (French)

Bream, 67.

Breast-milk, 13.

Brocoli, 20.

Butter, 11.

C A B B A G E S, 20.

Carp, 67.

Carrots, 23, 59.

Cellery, 21, 58.

Charr, 66.

Cheese, 10.

Cherries, 25.

Chewing our meat, 79.

Chicken, 13, 62.

Chocolate, 17.

Chubb, 67.

Circulation how carried
on, 7.

Cod, 67.

Coffee, 69.

Colliflowers, 20.

Crab, 68.

Cream, 11.

Cucumbers, 27, 28.

Currants, 16, 25, 56.

Custom in eating, 73.

Cyder, 43, 53.

I N D E X.

DANDELION, 21, 58.

Dates, 26.

Digestion, (nature of) 5,
&c.

Duck, 37, 39, 64.

EARTH-NUTS, 23.

Eat nothing that disagrees,
69, 72.

Eat not after exercise, 78.

Eating too much, 35.

Eel, 68.

Eggs, 65.

Endive, 21, 58.

FENNEL, 21.

Figs, 24, 26.

Fish, 37, 66.

Flounders, 37, 68.

Food, choice of, 72.

Fowls, 2.

Fruit, 24, 27.

Fruit dried, 26.

—dressed, 57.

—preserved, 26, 52.

Frying, 41.

GARLICK, 21, 60.

Geese, 39, 64.

Gooseberries, 1, 25, 56.

Grapes, 24, 56.

Gudgeons, 67.

HADDOK 67.

Hare, 62.

Heart-burn, 32.

Herring, 67.

Hollibut, 68.

JACK, 67.

Jellies, 39.

LEEKs, 60.

Lemons, 26.

Lettuce, 21, 58.

Lobsters, 68.

Lump, 67.

MACKREL, 67.

Meat, whether given for
food, 28, &c.

Meat much dressed, 38.

—lean or fat, 36.

—kept, 37, 72.

—young or old, 38, 42.

—in season, 72.

Melons, 27.

Milk, 9.

Mint, 21.

Moderation in eating, 74.

Mullet, 67.

Muscles, 8, 68.

Mushrooms, 24, 59.

Mutton, 61.

NUTS, 16.

OIL, 50.

Onions, 21, 23, 60.

Oranges, 26.

Oysters, 68.

PALATE should be
studied, 70.

Panada, 19.

Parsley, 21.

I N D E X

Parsnips, 23, 59.
 Partridge, 65.
 Pears, 55.
 Peas, 22, 60.
 Pickles, 52.
 Pidgeon, 37, 65.
 Pike, 67.
 Plaife, 68.
 Plover, 64.
 Pork, 39, 62.
 Potatoes, 23, 60.

RADDISHES, 22, 59.
 Raspberries, 56.
 Roach, 67.
 Roasting, 41.
 Rusks, 9.

S A G E, 21.
 Sago, 17.
 Salmon, 39, 66.
 Salt, 49.
 Salted provisions, 15, 49.
 Shad, 67.
 Shalot, 21.
 Shell-fish, 39.
 Shrimp, 68.
 Small birds, 65.
 Smelt, 66.
 Snipe, 64.

Soal, 68.
 Spices, 43, &c.
 Spinage, 21, 57.
 Sprats, 67.
 Stone-fruits, 55.
 Strawberries, 56.
 Sugar, 12, 50, &c.

T E A, 69.
 Thyme, 21.

Times for eating, 76.
 Toasted bread, 19.
 Trout, 66.
 Turbot, 68.
 Turkies, 63.
 Turneps, 22.
 Turtle, 66.

VARIETY of food, 34.
 Veal, 61.

W A T E R, 52.
 Water-fowl, 63.
 Wine, 53.
 Whittings, 67.
 Woodcock, 64.

Y A M S, 23.

